NOTES

1. Papers selected for inclusion in General Sessions will be available at the Conference in the following official languages of the United Nations: English, French, Russian and Spanish.

2. Papers selected for inclusion in Specialized Sessions will be available at the Conference in only one of the above official languages.

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THE ROLE OF FARM MANAGEMENT IN RELATION TO THE TECHNOLOGICAL DEVELOPMENT OF THE AGRICULTURAL INDUSTRY

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(1) The technological revolution in Canadian agriculture has had profound and far-reaching implications for the individual farmer and his rural community. It has called for economic and social adjustments for which many farmers in Canada have not been adequately prepared. Technological advance has created a complex, highly capitalized business unit for which many farmers have neither the managerial skill or finances to cope. It has transferred most of the services which farmers previously produced on their farms to the rapidly growing agri-business sector of the economy, and in the process has exposed farmers to new problems of processing, marketing and bargaining power. Technologically displaced farm people have been squeezed out of agriculture into other occupations for which they were poorly equipped.

(2) The technological revolution is moving rapidly ahead of the economic and social changes needed at the individual farm level. The gap must be closed if technological progress in agriculture is to become the full blessing which it is intended to be.

(3) Increased emphasis will have to be placed on farm management programs at the individual farm level to facilitate the adjustments which are required. Technological efficiency by itself is no guarantee of economic success. Farming in Canada is much more than a production or processing activity. It is a business - a highly capitalized and complex operation. The primary criterion of success is the level of living which each operator derives from his farm.

(4) The Canadian farmer is facing many difficult problems in his business at the present time. One of the more difficult problems involves that of scale of business. Many farmers simply do not have a size of operations large enough to justify the adoption of many of the recommended technological practices. As a result of the increasing complexity of the farming operations, the economies of scale associated with a larger volume of business, and the demand by the Canadian consumer for a uniform and high quality product, there has been a growing premium on specialization within the farm business. Increasing specialization and the growing dependence of the Canadian farmer on the market system have increased his vulnerability to risk and instability in the economy. This, in turn, has led to the need for a greater emphasis on more formal insurance programs and on public policies designed to alleviate problems of risk in agriculture. The technological revolution has caused a very significant increase in the quantity of capital needed to establish an economic size of farm unit. It has called for substantial changes in farm credit policies and has put pressure on

the Canadian farmer to make increased use of borrowed capital. It has raised the problem as to whether the rate of capital accumulation within the family farm is rapid enough to permit complete ownership of the farm business once every generation. Finally, and perhaps most significant of all, many farmers in Canada lack the managerial ability necessary to cope with the ever growing complexity of the farm business. Ways must be found to improve the management ability of many Canadian farmers if the industry is to remain progressive and responsive to continuing technological changes. This could be one of the most difficult problems emerging in the years to come.

(5) If farm management programs are to be developed which deal effectively with the implications of technological progress for the individual farmer a continuing program of research will be needed. The farm management specialist will require a program of research as comprehensive and aggressive as that of the physical and biological sciences. Indeed, it has been the sound program of research behind the physical and biological sciences which has led to the magnificant technological advances in agriculture and which, in the process, has generated many of the economic and social problems at the individual farm level.

(6) It would be worthwhile to list some of the problem areas which appear to have considerable priority in any farm management research program in Canada at the present time: Extent and Nature of economies of scale associated with various aspects of the farm business; Nature of the risk and instability impinging on the farm business and alternative methods of coping with it; Processes of capital accumulation within the family farm; Investment of credit in the farm business and debt repayment capacity of various forms of investment; Various types of land tenure and implications for the farm business; Estate planning including such problems as father-son agreements, retirement plans, transfer of the farm between generations; Economic returns on various types of farm resources by geographic region and type of enterprise; Developing guidelines for the optimum combination of enterprises within the farm business; Problems associated with young farmers getting established in farming; Ways of adjusting to and accommodating various types of technological innovations within the farm business; Methods to facilitate the movement of the redundant labor resource from agriculture to other occupations.

(7) A program of farm management research must be complemented by an effective extension policy if the fruits of research are to reach the individual farmer. The extension techniques which have worked so effectively in the technical disciplines do not appear to be altogether suitable in the field of farm management extension work. In the technical disciplines the extension worker is primarily involved with the transfer from the research laboratory to the farm of single, isolated physical or biological practices. It is a "piecemeal" type of presentation of data and information to the farmer. When it comes to the farm management extension specialist, however, the farmer insists that if the various technical innovations are to be of any value to him they must be <u>profitably incorporated</u> into his particular farm business. The shift must be from the piecemeal presentation of single, isolated practices to the whole farm approach. Farm management extension work tends to be a highly individualized, service type of operation. One of the greatest problems facing the farm management extension worker is the necessity of dealing with the individual farm business and at the same time reaching as many farmers as possible with the limited resources of time and money at his disposal.

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